DOCUMENT RESUME

ED 337 286 PS 019 880

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TITLE Developmental Expectations and Outcomes for African-American Infants: An Ethnomethodological Approach.
PUB DATE 20 Mar 91
NOTE 21p.; Paper presented at the Annual Meeting of the Association of Social and Behavioral Sciences (Nashville, TN, March 20, 1991).
PUB TYPE Reports - Research/Technical (143) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Black Mothers; Blacks; Cognitive Development; Cultural Awareness; *Cultural Influences; Developmental Tasks; *Infant Behavior; Motor Development; *Neonates; *Parent Attitudes; Research Methodology
IDENTIFIERS *African Americans; Brazelton Neonatal Behavioral Assessment Scale; *Parent Expectations

ABSTRACT

This study examined the interaction between infant behavior and maternal ethnocentric attitudes and expectations. The ethnomethodological approach used in this study was guided by the assumption that it is essential for an investigator to consider the broad cultural context in which behavior is studied. The behavior of 80 African-American neonates within 2 or 3 days of birth was assessed by means of the Brazelton Neonatal Behavioral Assessment Scale (BNBAS). A second assessment was made at 1 month. At each of these times, the Developmental Milestones Survey, created for this study, was used to assess mothers' expectations for their infants' attainment of developmental milestones. Results indicated that 1-month-old infants had improved their orientation and heightened their motor performance. However, state regulation had decreased. Infants in this study showed higher levels of performance in most BNBAS clusters than infants in an earlier study. Maternal responses were scored as either within or outside the expected developmental range. More within-range responses were given for motor items than for cognitive items. A reference list of 23 items is included. (BC)

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Developmental Expectations and Outcomes for African-American Infants: An Ethnomethodological Approach[1]

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PS 019880

[1]Paper presented at the Annual Meeting of the Association of Social and Behavioral Sciences, 20 March 1991, Nashville, TN.

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African-American infant development since the 1960s has been popular in social and behavioral science literature. Generally, the current understanding of the dynamic processes of infancy has come from the collection and interpretation of a large body of facts about normative development and its relationship to sociobiological influences (Super, 1981). Traditional research designs, unfortunately, have consistently defined the behavior of African-American infants on the basis of White norms. These race-comparative approaches perpetuate the idealization of the White norm while yielding little information about normative behaviors for non-White groups.

African-American infants used in traditional research are typically selected on criteria that index their "at-risk" status (e.g., low socioeconomic status, drug involvement, and poor nutrition). Furthermore, these investigations have mostly been without theoretical foundation, and have contributed little knowledge about variability within culture or variability in social practices and value systems. Thus, data reported from many of these investigations have not yielded information that is generalizable to the African-American population with its many diverse subgroups. These and other critical assessments of the extant research on African-American children abound (McLoyd & Randolph, 1983, 1984; Johnson, 1981; Nobles, 1981; Peters, 1981; Staples & Mirande, 1980). In essence, the scholarly community and the public have been left with a rather limited view of this population because of methodological weaknesses inherent in mainstream research.

Recent trends have seen African Americans involved more directly in research on their children and have offered practical suggestions for developing alternative approaches to balance the perspective (Hale-Benson, 1986; Boykin & Tims, 1985; Akbar,

1981; Nobles, 1981; Peters, 1981). The purpose of this discussion is to describe an approach used in a study of African-American infant development, which incorporates suggestions from researchers who are from the same culture.

Avoiding previous technical shortcomings, this research attempts to capture information that can be used to explain infant development from a viewpoint of cultural integrity of African-American family life. This approach is labeled the *ethnomethodological* approach. In this ethnomethodological approach, the principles and procedures used focus chiefly on events and influences that shape behaviors within a particular cultural group. The basic features of this approach include: (1) noncomparative analysis; (2) incorporation of a framework that respects the dynamics of the culture under study (i.e., African-American); (3) multiple methods and samples of behavior consistent with these cultural dynamics (e.g., variability in culture, social practices, and values); and (4) acknowledgment of the research process as an interruption in the "natural flow of events."

This approach is guided by two key assumptions. First, regardless of the circumscribed nature of any study of child development, it is scientifically and ethically essential for the investigator to consider the broader context of the culture in which behavior is studied. Second, the need for cultural sensitivity and recognition of one's own bias is paramount when working outside one's own social and cultural milieu. With these guidelines in mind, a study was undertaken to fill some information gaps concerning African-American infants.

In this study culture becomes a way of broadening the perspective on underlying processes of development and provides a matrix in which to learn about as well as

explain the adaptive capacities and strategies of infants. The study attempts to describe how patterns of performance over time may provide insight into the interaction between behavioral organization of the infant and the mother's ethnocentric practices and expectations. It is presumed that newborns are biologically predisposed to a certain matrix that modifies expressed behavior (Coll, Sepkoski, & Lester, 1981).

Method

Instrumentation

Major developmental variables for this study were obtained by the Brazelton Neonatal Behavioral Assessment Scale (BNBAS). The BNBAS is widely used to assess the behavioral repertoire of normal newborns, and the scale was used within this research for measuring the behavioral capacities of infant at approximately 48 hours and again at one month. The scoring system for the BNBAS, developed by Lester, Als, and Brazelton (1978), was used to summarized items into seven qualitative clusters: habituation, response decrement to the repeated presentation of a light, rattle, bell, and pin-prick (environmental "noise"); orientation, responses to animate and inanimate stimuli and overall alertness (availability for social interaction); motor performance, integrated motor acts and overall muscle tonus; range of state, the rapidity, peak, and lability of state changes; regulation of state, efforts to modulate or control the infant's own state (without assistance from the examiner/caregiver); autonomic stability, signs of physiological stress seen as tremors, startles, and changes in skin color (in response to maneuvers during the examination); and reflexes, the total number of deviant reflex scores. Higher scores indicate better performance on all clusters, except reflexes, where higher scores indicate more deviant responses.

Home visits were made at one month to observe mother-infant interactions during feeding, and to interview mothers about their child-rearing practices and attitudes, developmental expectations, and perceptions of their infants. These measures were obtained through a scale developed specifically for this research -- the Developmental Milestone Survey. Medical historical data, including obstetrical risk conditions, were obtained from hospital records and supplemented with direct interviews when necessary. Dubowitz examinations were routinely used to confirm reported gestational age, and the Ponderal Index was calculated for each infant as a measure of body mass, fetal growth, and nutrition. Lower values on the Ponderal index reflect thinness, while higher values reflect obesity.

Procedures

Infants were initially assessed with the BNBAS within the second or third day following their birth. Males were observed before circumcision, if this procedure was elected by their parents. The BNBAS was administered by an examiner in a dimly lit room adjacent to the newborn nursery. Examiners were all African-American females who had established reliability of administration and scoring in line with standards set by the instrument developers at a major teaching hospital in the Northeastern segment of the U.S.

A second exam was administered to infants in their homes with mothers present. An examiner administered the BNBAS while a scorer kept notes on the infant's performance and explained various behaviors and procedures to the mother. Conditions for home assessments were kept as similar to hospital conditions as possible. Specifically, examiners worked with mothers to prepare a location within the home that

was dimly lit and quiet. To the extent possible, infants were seen during mid-feeding for both examinations. Intercoder agreement was tested periodically and reliability coefficients ranged from .85 to 1.00, with a mean of .91. These reliability coefficients were based on each pair of examiners being within one point of one another for each behavioral item.

A Developmental Milestones Survey was used to assess mothers at two days and one month about their expectations for infants' attainment of developmental milestones (i.e., at what age are they expected to sit up, crawl, walk, etc.). This information was used to examine the extent to which infants' abilities and changes in those abilities (as determined by BNBAS scores) reflected African-American mothers' expectation of development.

Sample

Infants were 80 African-American neonates (41 females, 39 males) between 41 and 73 hours of age when first observed, Mn = 53.85, SD = 9.21. All infants were born at a teaching hospital in a large, Eastern city. Infants were from low to lower-middle (n = 49) and middle (n = 31) SES families. Rigorous criteria were used to select a normative "optimized" sample. The infants included in the sample were selected to meet the following criteria: (1) full-term (38-42 weeks of gestation; Mn = 40.25, SD = 1.09), (2) birthweight between 2,500 and 4,000 g (Mn = 3246.80, SD = 370.48), (3) appropriate for gestational age (AGA), (4) Apgar scores of 8 or above at one minute and at 9 or 10 at five minutes, (5) delivered by spontaneous vaginal delivery (n = 61) or by elective Caesarean section (n = 19), (6) healthy as defined by a normal pediatric examination, (7) single birth, (8) born to mothers between the ages of 18 and 38 years,

Mn = 25.70, SD = 5.02. Ponderal Index values were within normal ranges for full-term neonates, with a mean of 2.58 and standard deviation of 0.34.

The sample included 31 infants of primiparous mothers (first child) and 49 of multiparous mothers. All mothers had received prenatal care from at least the second half of their pregnancies. Most mothers (85 percent) had no more than four risk conditions out of a possible 41 on the Obstetrical Complications Scale (OCS). Family structures included nuclear (53 percent), single parent (9 percent), and extended (38 percent), with many families being headed by a female (67 percent). There were no mother-infant pairs in augmented family arrangements. Mothers were from various educational and occupational backgrounds, ranging from welfare recipient status to medical residents. The Hollingshead (1975) four-factor index of social status was used to estimate the SES of the sample. Although this scale is frequently used in behavioral research, it has been argued that it is not satisfactory for Black adults because it places greater emphasis on occupation than education (Baldwin, 1973; McAdoo, 1977). Therefore, a modified scoring procedure was used that reversed the weights given for education and occupation. These weighting procedures were use with an early version of the SES scale (Hollingshead and Redlich, 1958), which resulted in more accurate status estimates. Based on these SES estimates, 49 mothers were of low to lower-middle status, and 31 were of middle status. Hollingshead scale estimates were checked against background information used by research assistants to estimate SES (education, occupation, working vs. nonworking status, government assistance, family income, and residency). The distributions were unchanged.

Older mothers (26 years and over) tended to be of middle SES, and had fewer children, although the proportion of multiparas in both lower and middle SES groups was similar (65 percent and 61 percent, respectively). About 30 percent of the lower SES mothers breast-fed their babies in comparison to 48 percent of the middle SES mothers. About 43 percent of primiparas were breast-feeding compared to 35 percent of the multiparas.

Results

Infant Assessment

Descriptive data were calculated for BNBAS scores at two days and one month. Table 1 contains cluster means and standard deviations for the current sample at both examination times, two days and one month. Also shown for comparison purposes are data for two-day BNBAS scores taken on a sample of African-American infants in a previous study (Coll et al., 1981).

For the study sample, two-day-old infants showed good ability to shut out noises while they slept (habituation Mn = 5.19, SD = 1.78). These infants were controlled in their motor ability (motor performance Mn = 5.87, SD = 0.63); alert and oriented toward their social environment (state regulation Mn = 5.58, SD = 1.32). These infants used sophisticated strategies in organizing their behavior, including hand-to-mouth activity and locking onto visual and auditory stimuli. Their physiological systems did not seem to be particularly stressed (autonomic stability Mn = 6.61, SD = 0.98). Few deviate reflexes appeared during the examination (reflexes Mn = 0.53, SD = 0.97).

In comparing the two samples, infants from the current sample showed higher levels of performance than the Coll et al. (1981) sample for all clusters except

Table 1

Means and Standard Deviations on Brazelton Scale Cluster Scores for Study Sample at Two Days and One Month and Coll et al. (1981) Sample at Two Days

Cluster (Range of Scores) minimum-maximum	N[b]	Study Sample[a] One Month Mean	SD	Two Days Mean	SD	Coll et al. Two Days (N=24) Mean	SD
Habituation (1-9)	27	4.74	2.14	5.19	1.78	5.89	1.51
Orientation (1-9)	62	7.76	1.43	6.93	1.69*	5.89	1.48
Motor Performance (1-7.6)	62	6.18	0.82	5.87	0.63*	4.92	0.78
Range of State (1-5.5)	62	3.62	0.90	3.79	0.54	3.22	0.70
State Regulation (1-9)	62	4.80	1.28	5.85	1.32**	5.34	1.36
Autonomic Stability (1-8.3)	62	6.92	1.11	6.61	0.98	4.69	1.48
Reflexes (0-20)	53	0.74	1.15	0.53	0.97	1.95	1.32

[a] Pairwise *t*-tests were used to examine differences between two days and one month for the Study sample.

[b] Some Ns differ since all infants were not able to be tested on all items because of state behaviors (i.e., changed to an alert state or higher) or items were not administered.

*$p < .01$; **$p < .001$

habituation and range of state (t-ratios significant at $p < .05$). The Coll et al. (1981) sample consisted of infants whose mothers were all of lower SES backgrounds and had varying degrees of care and obstetrical medication. When a subsample of 27 lower SES infant from the current study were compared the Coll et al. (1981) group, these differences remained.

At one month, study infants showed improved orientation ($p < .01$) and heightened motor performance ($p < .01$) based on results from correlated t-tests. However, the ability of these infants to quiet and organize themselves decreased, as reflected in the state regulation means. A correlated t-test on state regulation scores revealed significant differences between two-days and one month ($p < .001$). Differences on this cluster are possibly explained by mothers' interference with normal hand-to-mouth behavior (confusing it with "thumbsucking"), which is a key strategy infants use to control themselves. The developmental expectations interviews supported this explanation in that 25 percent of the mothers reported that children should be discouraged from sucking their fingers from birth, and over 50 percent said before six months.

Maternal Expectations

Mothers in the study were surveyed to determine when they expected children to reach certain developmental milestones. The expected ranges for infants attaining these milestones were based on the Bayley Scales of Infant Development, the Kent Scales of Infant Development, and other published norms. Mothers' responses were scored as "within" for estimates given within the expected age range, or "outside" for estimates given beyond the normal developmental period. Table 2 displays the milestones covered

in the interview, the expected age range of mastery, and the percent of mothers who gave responses within the expected age ranges for each milestone.

Most mothers gave responses within expected age ranges for "smiling" (97 percent), "learning numbers" (76 percent), "sitting up" (75 percent), and "sending a child to a preschool" (73 percent). The percents of responses within range were lower for "babbling" (7 percent), "discouraging finger sucking" (13 percent), "imitating acts" (21 percent), and "weaning from breast or bottle" (24 percent). Significantly more within range responses were given by sample mothers for motor items (crawling, sitting up, taking steps, etc.) than for cognitive items (babbling, two-word sentences, learning ABCs, learning colors, etc.) as indicated by a t-ratio of 4.64 ($df = 78$, $p < .001$).

SES made a difference on only one item, weaning, with lower SES mothers reporting weaning at an earlier age than expected, $X^2 = 5.82$ ($df = 2$, $p < .05$). Relative to gender differences for infants, mothers of males (61 percent) expected "holding a spoon to feed" at later than normal age, while mothers of females (52 percent) reported ages within range; $X^2 = 6.06$, $df = 2$, $p < .05$). Further, mothers of females (52 percent) expected "holding a bottle" at ages earlier than expected range, while mothers of boys (71 percent) reported ages within the expected range; $X^2 = 5.93$, $df = 2$, $p < .05$. Essentially, it appears that mothers of females expected self-help skills to develop earlier than mothers of boys.

Discussion

This research represents an approach to understanding important interrelationships among critical factors in early development that are not often examined jointly in the literature. Moreover, measures of family culture (in this case

Table 2

Developmental Milestones Survey: Expected Age Range (Months) and Percentage of Mothers Giving Responses within the Expected Age Range

Milestone (At what age would you expect a child to):	Expected Age Range (months)[a] minimum-maximum	Percentage of Mothers Giving Responses within Expected Range
1. Smile	(0-4)	97.4
2. Be discouraged from finger sucking	(8-12)	12.7
3. Be weaned	(7-12)	23.7
Motor		
4. Crawl	(6-9)	61.0
5. Sit up alone	(4-7)	75.3
6. Pull up using furniture	(7-9)	57.1
7. Step alone	(11-12)	43.4
8. Hold own bottle	(5-7)	51.1
9. Pull a toy behind	(10-15)	57.8
10. Hold a spoon to feed	(12-14)	40.0
11. Stacking two blocks	(12-18)	35.6
12. Roll from stomach to back	(3-4)	38.6
13. Switch objects from hand to hand	(4-6)	46.7
Cognitive		
14. Speak two word sentences	(14-22)	31.2
15. Try to learn ABCs	(18-30)	39.0
16. Try to learn numbers	(12-24)	75.6
17. Babble	(1-2)	7.0
18. Imitate acts seen	(6-11)	20.0
19. Look for a toy dropped out of sight	(6-8)	28.9
20. Go to nursery or preschool	(24-36)	72.7
21. Try to learn color names	(18-30)	53.3
22. Point to common objects named	(12-18)	62.2
23. Point to parts of face named	(15-24)	53.3

[a] Based on the Bayley Scales of Infant Development, Kent Scales of Infant Development, and other published norms.

African-American culture) and environment were paired with biomedical and behavioral variables for establishing a comprehensive profile of developmental indicators and enhancing outcomes. This study points out what is possible if more representative, particularly normative, samples of mothers and children are selected for study. Also highlighted in this research is the importance of cultural sensitivity in collecting, analyzing, and interpreting data. For instance, by including methods for capturing mothers' developmental expectations, the investigators were able to identify environmental factors that help explain observed changes in infant behavior over time.

Findings show that under optimal conditions, two-day-old African-American infants perform well on standard behavioral assessment scales. This finding differs from previous studies of African-American infants that suggest low performance levels in all areas except motor ability. Often included in related studies are mothers with problems or less than optimal prenatal or perinatal courses, but the current research assessed a sample with optimal conditions for both mother and child. Further, few differences were found between lower SES and middle SES groups, indicating that optimal biomedical and psychosocial conditions lead to good behavior outcomes in African-American infants irrespective of economic factors. Only when research focuses on mothers with problems will the infants perform poorly on behavioral assessment scales.

This study suggests that the BNBAS is an appropriate assessment tool for use with full-term African-American infants in that (1) it is used at a period when cultural bias has not had a chance to influence performance, and (2) it is sensitive to changes in behavior over time and may give some clues to environmental influences that impinge on behavior. Nevertheless, caution must be exercised when generalizing these finding to

all Black infants because scores will vary with the biomedical characteristics of the infants and environmental influences. For example, results indicated that over time infant assessment data coupled with maternal expectations data provided a different explanation for infant development. Earlier research failed to consider such an explanatory model because of sole reliance upon infant assessment data.

Other variables that may influence outcomes in related research are biomedical characteristics of mothers, variability in mothers, expectation for development, and researcher bias. On this last point, researcher bias, the current study is particularly useful in advancing theories in the area, since all individuals associated with research activities were African American. Moreover, examiners on the research team in this study received the same training on the BNBAS as individuals involved with the Coll et al. (1981) study, but findings here differed from this earlier study due to sampling, supplementary measures, and cultural perspective. More successful behavioral outcome appeared to result from the current research approach, and future studies should examine systematically the role of research perspective on outcomes.

The infant assessment data paired with maternal interview data produced useful information on how infants are shaping and being shaped by their environments as early as the neonatal period. Results revealed that, at one month, infants showed improved social and motor abilities, but something mothers were doing interfered with natural capabilities for infants to quiet and organize themselves. By one month, mothers' child-rearing practices or expectations for development seem to have influenced infants's abilities. In this sense, the infant is being shaped by the environment. On the other hand, the infant's high level of motor ability may also be shaping the caregiver or

environment. The motor precocity of African-American infants, which is well-documented in previous research (e.g., Scott, Ferguson, Jenkins, & Cutter, 1955), was evident in this study. Black mothers seem to hold more realistic explanations for their infants' motor development than for cognitive development. Therefore, the infants' coupled with mothers' expectations for accelerated motor development greatly influences the extent to which mothers facilitate certain developmental activities.

Changes in infant behavior that may be due to environmental inputs do not appear to be related to SES differences in mothers as suggested by previous research. In fact, few SES differences were found for infant behaviors or mothers' expectations. Whether SES differences or differences in other aspects of the caregiving environment emerge at later ages and act to influence behavior is an issue for further investigation.

Certain findings from the current study require further investigation before the true nature of development can be understood for this population. The poorer state regulation at one month could be interpreted as a negative finding. However, because the relationship of state regulation to other behaviors has not been clearly established, it cannot be concluded that diminished state regulation is altogether detrimental. A plausible explanation could be that diminished state regulation is related to more favorable outcomes in other behavioral areas during the neonatal period. These relationships should be investigated in future research. Also, maternal interview data (expectations) were scored on the basis of published norms. It is highly likely that the normative samples did not include large numbers of African-American infants, and therefore may not be representative of norms for Black infants. Given this lack of normative data for the ages at which African-American infants master developmental

milestones, these maternal interview data should be interpreted cautiously. Longitudinal research is needed on African-American infant samples to determine in a definitive fashion when various developmental milestones are achieved. These data could then be used to determine with greater accuracy differences in mothers' expectations for development and infants' actual accomplishments.

The ethnomethodological approach incorporated into this proves to be significant and extends research on African-American children in several ways. Findings from this research are unique because of the investigators from the same ethnic background of the infant take an in-depth look at developmental factors beginning with the neonatal period. In addition, a large portion of the sample consisted of middle-income African Americans, a population about which little is written or understood. It is expected that the results of this study will provide new normative expectations for African-American newborns and alter existing concepts about this critical age period relative to the target population.

A major problem with research on the African-American child is that little attention is paid to the cultural perspective offered by the investigator and how this perspective might influence interpretations of infant development (Winborne & Clark, 1989; Oyemade & Rosser, 1980). This study demonstrates the value in going beyond traditional assumptions and including methods that foster a greater understanding of development in African-American children. While other studies using this approach may produce varying findings, it is clear that the cultural integrity of African-American family dynamics should be a scientific requirement. This fact is especially true when findings will guide the development of educational and social interventions, as well as formulate

policies for black families.

Acknowledgements

The authors express thanks and appreciation to Peal Rosser, M.D. for her pioneering efforts in developmental pediatrics, and particularly, in this research. Also, special thanks are extended to the interviewers, coders, and especially to the families who assisted in the gathering of these data.

References

Akbar, N. (1981). Our destiny: authors of a scientific revolution. In McAdoo, J., McAdoo, H., & Cross, W. E. (Eds.), Fifth conference on empirical research in black psychology. Washington, DC: NIMH, 1981.

Baldwin, C. (1973). Comparison of mother-child interaction at different ages and in families of different education levels and ethnic backgrounds. Paper presented at annual meeting of Society for Research in Child Development, Philadelphia.

Boykin, A. W. and Tims, F.D. (1985). Black child socialization: a conceptual framework. In Black Children. McAdoo, H.P. and McAdoo, J.L. (Eds.) Beverly Hills, CA: Sage Publications, Inc.

Boykin, A. W. (1977). Black psychology and the research process: Keeping the baby but throwing out the bath water. Journal of Black Psychology, 4, 43-64.

Coll, C. G., Sepkoski, C., & Lester, B. M. (1981). Cultural and biomedical correlates of neonatal behavior. Developmental Psychobiology, 14, 147-154.

Hale-Benson, J. (1986). Black Children Their Roots, Culture, and Learning Styles. Baltimore, MD: The Johns Hopkins University Press.

Hall, W. S. (1974). Research in the Black community: Child Development. In J. Chunn (Ed.), The survival of Black children and youth. Washington, DC: Nuclassics and Science Publishing.

Hollingshead, A. (1958). Index of social position. Appendix (developed in 1957) to Hollingshead, A., and Redlich, F. C., Social class and mental illness: A community study. New York: John Wiley & Sons, Inc.

Hollingshead, A. B. (1975). Four factor index of social status. Unpublished manuscript, Yale University, New Haven, CT.

Hollingshead, A. B., and Redlich, F. C. (1958). Social class and mental illness. New York: John Wiley & Sons, Inc.

Johnson, R. (1981). Cultural heritage and parenting in Black families. In J. McAdoo, H. McAdoo, and W. E. Cross (Eds.), Fifth conference on empirical research in black psychology. Washington, DC: NIMH.

Lester, B. M., Als, H., & Brazelton, T. B. (1978). Scoring criteria for seven clusters of the Brazelton Scale. Unpublished manuscript, Child Development Unit, Children's Hospital Medical Center, Boston, MA, 1978.

McAdoo, H. (1977, December). The impact of extended variables upon the upward mobility of Black families, Final Report to the USDHEW. Columbia, MD: Columbia Research Systems, Inc.

McLoyd, V. C., and Randolph, S. M. (1983, April). Secular trends in the study of Afro-American children: A review of Child Development 1936-1980. Paper presented at the biennial meeting of the Society for Research in Child Development, Detroit, MI.

McLoyd, V. C., and Randolph, S. M. (1984). The conduct and publication of research on Black children: A content analysis. Human Development, 3, 65-75.

Myers, F., Rana, P. Y., and Harris, M. (1979). Black child development in America 1927-1977: An annotated bibliography. Westport, CT: Greenwood Press, 1979.

Nobles, W. W. (1981). African-American family life: An instrument of culture. In H. McAdoo (Ed.), Black families. Beverly Hills, CA: Sage Publications.

Oyemade, U. J., and Rosser, P. L. (1980). Development in Black children. Advance in Behavioral Pediatrics, 1, 153-179.

Peters, M. F. (1981). Parenting in Black families with young children: A historical perspective. In H. McAdoo (Ed.), Black families. Beverly Hills, CA: Sage Publications, Inc.

Scott, R. B., Ferguson, A. D., Jenkins, M. E., and Cutler, F. F. (1955). Growth and development: V. Neuromuscular pattern of behavior during the first year of life. Pediatrics, 16, 24-30.

Staples, R., and Mirande, A. (1980). Racial and cultural variations among American families: A decennial review of the literature on minority families. Journal of Marriage and the Family, 42, 887-903.

Super, C. M. (1981). Behavioral development in infancy. In R. Monroe, R. L. Monroe, and B. Whiting (Eds.), The handbook of cross-cultural human development. New York: Garland, 1981.

Winborne, D. G. (1989). African-American research. In Hemmons, W. M. (Ed.), The state of Black Cleveland. Cleveland, OH: Urban League of Greater Cleveland.